

1 **CLAIMS**

2 1. A method comprising:
3 encoding a first frame of data;
4 generating a first timestamp associated with the first frame of data, wherein
5 the first timestamp includes complete timing information;
6 transmitting the first frame of data and the associated first timestamp to a
7 destination;
8 encoding a second frame of data;
9 generating a second timestamp associated with the second frame of data,
10 wherein the second timestamp includes a portion of the complete timing
11 information; and
12 transmitting the second frame of data and the associated second timestamp
13 to the destination.

14
15 2. A method as recited in claim 1 further comprising:
16 encoding a third frame of data;
17 generating a third timestamp associated with the third frame of data,
18 wherein the third timestamp includes a portion of the complete timing
19 information; and
20 transmitting the third frame of data and the associated third timestamp to
21 the destination.

1 3. A method as recited in claim 1 further comprising:
2 identifying timing information related to transmitting the first and second
3 frames of data; and
4 transmitting the timing information to the destination.

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6 4. A method as recited in claim 1 wherein the first timestamp includes
7 hour information, minute information, second information, and a frame number.

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9 5. A method as recited in claim 1 wherein the first timestamp includes
10 an offset value that is used to relate the time associated with a frame of data to true
11 time.

12
13 6. A method as recited in claim 1 wherein the second timestamp
14 includes a frame number.

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16 7. A method as recited in claim 1 further comprising:
17 encoding a plurality of frames of data; and
18 generating additional timestamps associated with each of the plurality of
19 frames of data, wherein the majority of the additional timestamps include a portion
20 of the complete timing information.

1 **8.** A method as recited in claim 1 further comprising:
2 encoding a plurality of frames of data;
3 generating a full timestamp associated with one of the plurality of frames of
4 data, wherein the full timestamp includes the complete timing information; and
5 generating a plurality of compressed timestamps associated with the frames
6 of data that are not associated with the full timestamp, wherein the compressed
7 timestamps include a portion of the complete timing information.

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9 **9.** One or more computer-readable memories containing a computer
10 program that is executable by a processor to perform the method recited in claim
11 1.

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13 **10.** A method comprising:
14 identifying multimedia content to be encoded;
15 encoding the identified multimedia content into a plurality of frames of
16 data;
17 generating a plurality of full timestamps associated with a portion of the
18 frames of data, wherein each full timestamp contains complete time information;
19 and
20 generating a plurality of compressed timestamps associated with frames of
21 data that are not associated with a full timestamp, wherein each compressed
22 timestamp contains a portion of the complete time information.

1 11. A method as recited in claim 10 wherein the full timestamps are
2 associated with every Xth frame of data.

3
4 12. A method as recited in claim 10 wherein the full timestamps are
5 associated with frames of data spaced apart by a predetermined time period.

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7 13. A method as recited in claim 10 wherein the full timestamps include
8 hour information, minute information, second information, and a frame number.

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10 14. A method as recited in claim 10 wherein the full timestamps include
11 an offset value that is used to relate the time associated with a frame of data to true
12 time.

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14 15. A method as recited in claim 10 wherein the compressed timestamps
15 include a frame number.

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17 16. A method as recited in claim 10 further comprising storing the
18 frames of data and the associated timestamps.

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20 17. A method as recited in claim 10 further comprising transmitting the
21 frames of data and the associated timestamps to a plurality of destinations.

1 **18.** One or more computer-readable memories containing a computer
2 program that is executable by a processor to perform the method recited in claim
3 10.
4

5 **19.** A method comprising:
6 receiving a first frame of data;
7 receiving a first timestamp associated with the first frame of data, wherein
8 the first timestamp includes complete timing information for the first frame of
9 data;
10 receiving a second frame of data; and
11 receiving a second timestamp associated with the second frame of data,
12 wherein the second timestamp includes a portion of the timing information.

13
14 **20.** A method as recited in claim 19 further comprising decoding the
15 first frame of data and the second frame of data.

16
17 **21.** A method as recited in claim 19 further comprising:
18 receiving a third frame of data;
19 receiving a third timestamp associated with the third frame of data, wherein
20 the third timestamp includes a portion of the timing information; and
21 decoding the third frame of data.

1 **22.** A method as recited in claim 19 further comprising receiving timing
2 information related to the manner in which frames of data are transmitted from a
3 data source.

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5 **23.** A method as recited in claim 19 wherein the first timestamp is a full
6 timestamp and the second timestamp is a compressed timestamp.

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8 **24.** A method as recited in claim 19 wherein receiving the first
9 timestamp includes updating all timing parameters with the information contained
10 in the first timestamp.

11

12 **25.** A method as recited in claim 19 wherein receiving the second
13 timestamp includes updating timing parameters with the information contained in
14 the second timestamp.

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16 **26.** One or more computer-readable memories containing a computer
17 program that is executable by a processor to perform the method recited in claim
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1 **27.** One or more computer-readable media having stored thereon a
2 computer program that, when executed by one or more processors, causes the one
3 or more processors to:

4 encode a first frame of data;

5 generate a first timestamp associated with the first frame of data, wherein
6 the first timestamp includes complete time information;

7 encode a plurality of subsequent frames of data; and

8 generate a plurality of subsequent timestamps, wherein each of the
9 subsequent timestamps includes a portion of the time information.

10
11 **28.** One or more computer-readable media as recited in claim 27
12 wherein the complete time information includes hour information, minute
13 information, second information, and a frame number.

14
15 **29.** One or more computer-readable media as recited in claim 27
16 wherein each of the subsequent timestamps includes a frame number.

1 **30.** An apparatus comprising:

2 an encoded multimedia content source; and

3 a decoder coupled to receive encoded multimedia content from the encoded
4 multimedia content source, wherein the video content includes a first frame of data
5 having an associated first timestamp, such that the first timestamp includes
6 complete timing information for the first frame of data, and wherein the encoded
7 multimedia content includes a second frame of data having an associated second
8 timestamp, such that the second timestamp includes a subset of the timing
9 information included in the first timestamp.

10 **31.** An apparatus as recited in claim 30 wherein the decoder is
11 configured to decode the first frame of data and the second frame of data.
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